

In The Claims:

1. (Currently Amended) A method of controlling a vehicle comprising:

determining a relative roll angle;

determining when the vehicle is in a transitional maneuver;

determining a wheel lifted or grounded state for each vehicle wheel; and

when the vehicle is in a transitional maneuver and two inside wheels are grounded, setting a roll signal for control to the relative roll angle.

2. (Cancel)

3. (Currently Amended) A method as recited in claim 1 further comprising of controlling a vehicle comprising:

determining a relative roll angle, said relative roll angle between the;

determining when the vehicle is in a transitional maneuver;

when the vehicle is in a transitional maneuver, setting a roll signal for control to the relative roll angle; and

when the vehicle is not in a transitional maneuver and the relative roll angle is less than a threshold, setting a reference bank to the maximum of a previously determined reference bank or the relative roll angle plus a wheel departure angle.

4. (Original) A method as recited in claim 1 further comprising operating a safety system in response to the roll signal for control.

5. (Original) A method as recited in claim 1 further comprising a vehicle rollover in response to the roll signal for control.

6. (Original) A method as recited in claim 1 wherein the transitional maneuver is a right to left maneuver.

7. (Original) A method as recited in claim 1 wherein the transitional maneuver is a left to right maneuver.

8. (Previously Presented) A method of controlling a vehicle comprising:

determining a relative roll angle;
determining a wheel lift status; and

when the relative roll angle is above a non-transition threshold and the wheel lift status is grounded, adjusting a reference bank angle to the maximum of either the reference bank angle or the relative roll angle plus the wheel departure angle.

9. (Original) A method as recited in claim 8 further comprising generating a roll signal for control in response to the reference bank angle.

10. (Original) A method as recited in claim 9 further comprising operating a safety system in response to the roll signal for control.

11. (Original) A method as recited in claim 9 further comprising a vehicle rollover in response to the roll signal for control.

12. (Original) A method as recited in claim 8 wherein the wheel lift status is a grounded status at one of two inside wheels.

13. (Original) A method of operating a vehicle comprising:

determining roll condition;
holding a peak brake pressure to counteract rollover;
determining a first wheel departure angle;
determining a second wheel departure angle after the first wheel departure angle; and

when the change of the first wheel departure angle and the second wheel departure angle is less than a threshold, releasing the peak brake pressure.

14. (Original) A method as recited in claim 13 further comprising determining a roll rate, when the vehicle is below a predetermined roll rate, releasing the peak pressure.

15. (Original) A method as recited in claim 13 further comprising counteracting a rollover in response to the brake pressure.

16. (Original) A method of operating a vehicle comprising:
determining a drive torque;
determining a wheel departure angle; and
when the drive torque is below a first threshold and the wheel departure angle is less than a second threshold, initiating active wheel lift detection.

17. (Original) A method as recited in claim 16 wherein initiating comprises requesting an engine torque reduction.

18. (Original) A method as recited in claim 16 wherein initiating comprises requesting a brake pressure command to a wheel.